What Is Claimed Is:

1. A system for assembling optical components relative to one another, the system comprising:

a plurality of carrier components, each one of the carrier components having a base portion, a top surface and a bottom surface of the base portion in opposition to one another, the base portion defining a given geometric shape, and at least one of the optical components disposed on the top surface of the base portion;

an optical platform having an upper surface and a lower surface in opposition to one another, the upper surface of the optical platform having alignment patterns extending upwardly therefrom, and the alignment patterns defining a plurality of regions therebetween on the optical platform, wherein one of the regions is configured to secure the given geometric shape of the base portion of one of the carrier components thereto; and

alignment means for aligning an optical transmission between the optical components mounted on separate ones of the carrier components.

2. A system according to claim 1 wherein the plurality of carrier components comprise a first given set of interchangeable blocks, wherein a first given set of the interchangeable blocks comprise the optical components of a fiber assembly and a collimating lens.

3. A system according to claim 2 wherein the plurality of carrier components comprise a second given set of interchangeable blocks, the second given set of interchangeable blocks comprise the optical components of an isolator, a photo-detector, and a splitter.

4. A system according to claim 3 wherein the plurality of carrier components comprise a third given set of interchangeable blocks, the third given set of interchangeable blocks comprise a laser on a sub-mount and a collimating lens.

5. A system according to claim 1 wherein each one of the plurality of carrier components comprises at least one optical terminal, wherein the at least one optical terminal of each one of the plurality of carrier components is configured to transmit a collimated beam having a given diameter and a collinear lateral and vertical positioning between two of the plurality of regions.

6. A system according to claim 1 wherein the optical platform and the carrier components are assembled together using a pick-place automated tool.

7. A system according to claim 1 wherein the carrier components are attached to the optical platform using die-attach equipment.

8. A system according to claim 1 wherein the plurality of carrier components comprise at least one electrical terminal, the at least one electrical terminal is configured for electrical communication

with corresponding electrical terminals configured within the plurality of regions on the optical platform.

9. A method of assembling optical components relative to one another, the method comprising:

selecting at least two carrier components from a group of carrier components, each one of the carrier components having at least one optical component mounted thereon;

selecting a given number of regions from a plurality of the regions formed by alignment patterns on an optical platform, the given number of regions being equal in number to the at least two carrier components selected from the group of carrier components; and

positioning each one of the at least two carrier components within the selected regions formed by the alignment patterns on the optical platform.

10. An assembly of optical components, the assembly comprising:

a platform for receiving and supporting a plurality of carrier components having optical components mounted thereon;

carrier component receiving stations formed on the platform, each of the stations being adapted to receive and retain one of the carrier components;

a first one of the carrier components having a light beam outlet; and

a second one of the carrier components having a light beam receiving port;

wherein the optical component receiving stations are disposed to position the first one of the components and second one of the components relative to one another such that the light beam outlet and the light beam receiving port are in alignment with one another.

11. An assembly according to claim 10 wherein said first one of the carrier components comprises a selected one of a laser diode and a light emitting diode in combination with a collimating lens.

12. An assembly according to claim 11 wherein the second one of the components comprises a collimating lens and a fiber optic assembly.

13. An assembly according to claim 12 further comprising a third carrier component for disposition between the first one of the carrier components and the second one of the carrier components, the third carrier component having an inlet adapted to receive a light beam from the light beam outlet of the first carrier component and an outlet adapted to direct at least a portion of the light beam toward the second carrier component, and at least one optical element between the third carrier component inlet and the third carrier component outlet for altering the light beam.

14. An assembly according to claim 13 wherein the third carrier component includes an isolator.

15. An assembly according to claim 13 wherein the third carrier component includes at least one

selected from a group consisting of a beam splitter and a beam reflector.

16. An assembly according to claim 13 wherein the third carrier component includes a photodiode.

17. An assembly according to claim 13 wherein the platform comprises a third station for receiving and supporting the third carrier component in a position for receiving the light beam from the first carrier component and for directing at least a portion of the light beam toward the inlet of the second carrier component.

18. An assembly according to claim 17 wherein the platform is provided with electrical conduits having terminals at at least one of the stations to power electro-optical elements disposed on the carrier component in the at least one of the stations.

19. An assembly according to claim 17 wherein all light beams between optical components are parallel to a given surface of the platform.

20. An assembly according to claim 17 wherein the platform comprises additional stations, each of the additional stations adapted to receive a carrier component selected from a multiplicity of optical components, and each of the carrier components adapted to provide a selected function relative to the emitted light beam.

21. A method for assembling optical components into an assembly for providing an emitted beam of light and for manipulating the beam of light to provide a desired result, the method comprising the steps of:

providing an optical component mounted to a carrier component for emitting a light beam;

providing further optical components mounted to a further carrier component, the optical components

adapted for manipulating the emitted beam to obtain a desired optical output;

providing a platform having stations adapted to receive the carrier components having the optical components and retain the carrier components having the optical components in position for interaction with each other so as to effect the desired optical output;

providing a repository of diverse optical components mounted to carrier components, each adapted to perform an operation on the emitting beam of light; and

fixing the carrier component having the light emitting optical component, and the further carrier components having the optical components selected from the repository of optical components, to the platform;

whereby to form an assembly of optical components configured to manipulate the emitted beam to accomplish the desired result.